JOHN KIERAN'S Nature Notes

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ILLUSTRATED BY FRITZ KREDEL



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FIRST EDITION

This book is affectionately dedicated to the man who drove me to it,
Colonel Theodore Roosevelt,
who, like Hamlet, knows a
Hawk from a Handsaw
When the Wind
Is Southerly.

Acknowledgment

I wish to express sincere appreciation to the Woman's Home Companion for permission to reprint some of the material from my articles in that magazine and to reproduce the pictures by Fritz Kredel that went with them.

Foreword

In the pages that follow I present to you some of my friends. They are, for the most part, common trees, common birds, common animals and common flowers. Possibly some readers will know them better than I do. If so, their debt to these common friends must be the deeper for better acquaintance. I can truthfully and sincerely set it down that hours, days and years in the field with these common friends were filled with quiet and ever-growing delight, and the things they taught me have left me humble, hopeful and grateful.

THE AUTHOR.

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Main

On a bright summer day two men were walking in a meadow. One was a visitor and the other was the farmer who owned the meadow and the apple orchards on either side. The visitor reached down and picked a wild carrot—the common, flat-topped circular white flower sometimes called Queen Anne's lace—and pointed to a purple spot near the center of the flower. The farmer glanced at the spot and remarked: "Oh, a bug." The visitor said nothing but picked another of the flowers and held it toward the farmer for comment. "H'mmm, another bug," said the farmer. But when a

third wild carrot was picked and found to display the same purplish "bug" amid the bloom, the farmer took the flower in hand and, peering with awakened curiosity, discovered that the "bug" was part of the flower. He had lived for many summers amid wild-carrot blooms by countless thousands and never had noticed that before. "Well," said the farmer sagely, "learning about things just means looking a little closer, doesn't it?"

Farmers look down on the humble wild carrot as an annoying weed not only because it usurps soil that might otherwise support good timothy hay but also because, when eaten in quantities by cows, it imparts a faint and usually unrelished flavor to the milk. The difference between a flower and a weed was best expressed by the authority who said that a weed was a flower out of place.



A STROLLER in the March or April woods, when the trees are still bare and the wet thickets are just beginning to show signs of returning greenery, may stir up a mourning-cloak butterfly (also called the Camberwell beauty) and set it fluttering off through the moist woodland. How does a frail butterfly come to hatch out and brave the season before the great oaks and stalwart maples have dared to spread their leaves to the cold nights and raw winds of early and uncertain spring? The answer is that the mourning cloak does not hatch out in that season. It is a survivor of last year's green

mansions and has "hibernated" or slept through the winter in the manner of the big bear and the stout woodchuck. Some butterflies migrate like the birds. Others hibernate like various animals. The miracles of nature are myriad, and the humble and delicate mourning cloak surviving the great snows, the cruel cold and the wild winds of winter is not the least of strange things in the wonderful outdoors.



Every Boy in the country cocks an eye when he sees a bird's nest. The great-crested flycatcher, whose shrill cry always betrays his presence in any rural district, has an odd trick to protect the nest it builds in some hollow of a tree. Almost invariably it weaves a cast-off snakeskin into the material of its nest. The prying human hand, or other raiding party, that comes suddenly on a snakeskin in a dark place usually withdraws hurriedly, without further investigation. That's the great-crested's idea in putting it there. Two things are worth considering in the matter of this peculiar ingredi-

ent in the nest of this very particular bird. One is the search for a cast snakeskin that the bird must make before the nest can be considered fit for occupancy. A boy sent out to look for a cast snakeskin would consider it almost a wild-goose chase. But these birds seem to know where to get them when they want them. The second point to be considered is: Whoever taught the great-crested the very useful trick of putting a cast snakeskin in its nest?



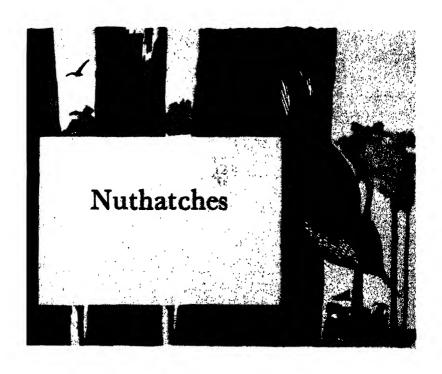
Certain flowers are lures for certain birds. Flowers of the Monarda group—like the flaming bee balm or the wild bergamot—planted in a rural garden will always attract hummingbirds if they are summer residents of that area. Hollyhocks and honeysuckle also are appreciated by hummingbirds. A brook with overhanging flowers is a favorite haunt for these needle-billed feathered darters whose wings beat so rapidly that the motion is too fast for the eye to catch. Buzzing busily about the garden or along the brook, they really seem on invisible wings. To bring hummingbirds closer to

hand or eye, glass test tubes, wrapped with imitation flower petals of linen and filled with sugared water, will provide a luring feeding station for the fine-feathered midgets of the bird world in any dooryard garden in their territory.



ALWAYS the spring woods are brightened by dogwood blooms. Every child in the country has gathered dogwood blossoms at some time or another and would say that he knows the flower well. But does he? The chances are that he never even notices the flower. What most persons see and believe to be the large and attractive "petals" of the flowering dogwood are not petals at all. The actual flowers of this shrub or tree are small, inconspicuous and often overlooked. They are the rather darkish—by comparison—little group in the center of the large white offerings of the dogwood

display. What are ordinarily accepted as the "petals" of the dogwood are really the protective coverings or "bracts," as the botanists call them, that protect the flower group through the winter. There are many common varieties of dogwood that have no such flaunting and attractive bracts, which probably is the reason why they are not known by many walkers in the woods or are confused with other shrubs like the many viburnums, whose flowering ways are somewhat similar. But the attractive bracts of the flowering dogwood have kept it in the public eye and the human heart.



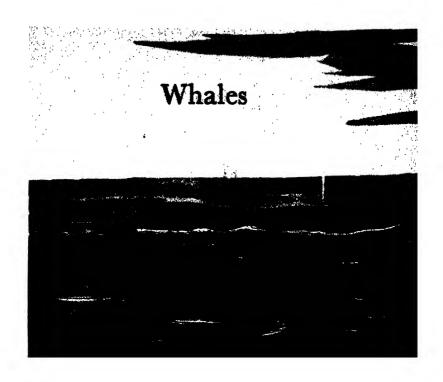
ONE BIRD that can be identified without asking a neighbor or thumbing through the colored plates of bird guides is the nuthatch—a sparrow-sized bird of which every section of the country has at least one resident or migrant species. The nuthatch is the only native bird that can walk down a tree trunk or fence post head first. If you see a small bird performing that difficult gymnastic stunt with the greatest of ease and nonchalance, it's a nuthatch of some kind. They are usually on the hunt for insects in or under the bark, though their name "nuthatch" is allegedly derived from

their fondness for wedging nutlets of trees and shrubs into crevices of the bark and whacking away with their bills to get at the meat of the matter. They are fond of a nut diet, unsalted peanuts included, and can be attracted to the dooryard by placing such dainties in baskets on tree trunks or branches, but they also fancy suet in cold winter weather and will return winter after winter to the same friendly feeding stations.



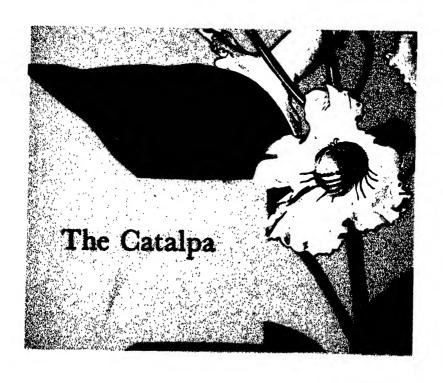
Shakespeare referred to honeybees as "singing masons building roofs of gold." The cultivated hive, with the deep frames of its "living room" and the neat boxes of the honey storage plant above, is a marvelous object of insect industry and human interest. But the humble bumblebee, who has no such housing provided for it by humans, deserves a few words of praise, even if it provides no honey for the table. Without the bumblebee, the country's annual crop of red clover would be a failure. The burly bumblebees, zooming heavily about their daily labors afield, are the only nectar-

gathering insects with tongues that are long enough to probe the red-clover blossoms to their depths. In this process they gather and distribute the pollen from one plant to another, and thus the red-clover blooms are fertilized and their life cycle continued through the years.



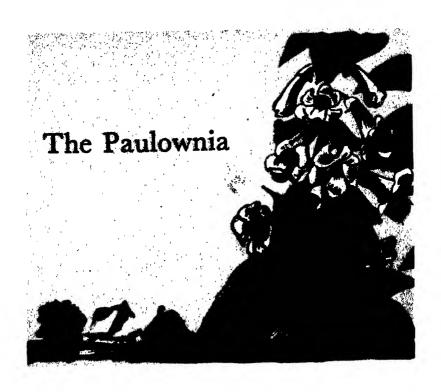
Children Learn with some mild surprise that a whale is not a fish but an animal, even though it lives in the sea and looks like a great fish. A whale has warm blood and breathes air into its lungs just like any other animal. But what is often overlooked is that the large species of whale are not only the biggest animals in the world, but the biggest animals the world ever saw. The dinosaurs and brontosaurs and all the huge monsters of the antediluvian fens weren't in it with the great whales of then and today—gigantic animals that may reach a total length of ninety feet and average in weight about

a ton to each running or swimming foot. So when the monsters of old are mentioned, remember that the whale that is still in the seas is bigger than any other animal that ever ranged the land, sea or sky.



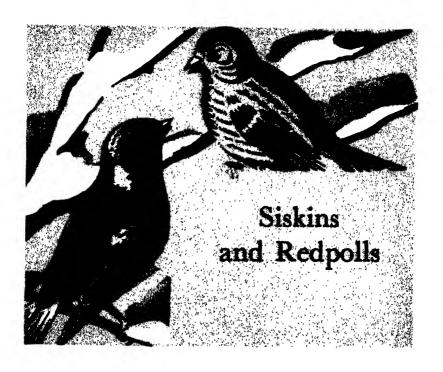
Those who pay any attention to the flowering trees of our lawns, gardens, fields and forests must be familiar with the flaunting white blossoms of the catalpa in their pyramidal or candelabra-like settings. But how many persons have ever peered down into those charming chalices, the individual flowers? The delicate purple, white and yellow stripes and dotted pattern within are worth more than a passing glance. Take a look at the next opportunity. Satisfaction is guaranteed. The leaves of the catalpa are so large that children often refer to it as the tree with "elephant's ears." Some-

times the children call it "the cigar tree," too, because the fruit pod is a long, thin, beanlike structure that, by a stretch of the imagination, so easy in childhood, might pass for a slim cigar—until an attempt is made to smoke it!



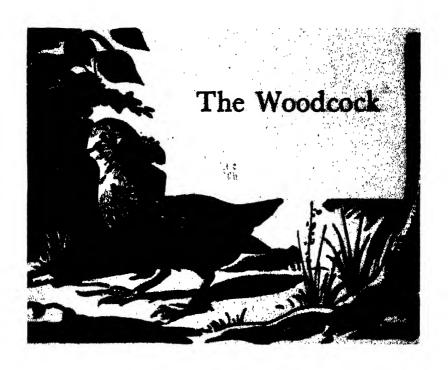
If any friend reports a "purple-flowering catalpa" in your neighborhood, it may be worth your journey to have a look at it. The chances are that it will prove to be a paulownia, a tree whose blooms bear a general resemblance to the catalpa bouquets. But the color is not the only difference. The paulownia blossom spray takes two years to reach maturity. The first winter finds them closed and wrapped in what look like individual chamois coverings. The following spring they open in all their purple glory. Thus there are always two crops of flowers on a blooming paulownia—the showy

petals of the season and those that are modestly waiting for the next year. This friendly tree, introduced from China and named for a Russian princess, Anna Paulowna, daughter of Czar Paul I, is spreading rapidly across the country and, with the husk of this year's flowers and the brown velvet buds of next year's flowers plain to see when the leaves are off, it is easily distinguishable in the winter season from its neighbors.



THERE IS no more cheerful an outdoor sight in a driving snow-storm than a black birch tree literally alive with pine siskins and redpolls chirping, chattering and feasting on the minute seeds of the birch "cones." These merry little winter visitors from the North forage widely in fair weather, but, somehow, the black birch is their favorite lunch counter when the snowflakes are riding the winter winds. They fly and feed in flocks and seem unperturbed by the whirling snow or the wailing wind. They are small birds, about the size of goldfinches, and doubtless they are

often mistaken for goldfinches by those who notice them at all. But siskins and redpolls are heavily striped where the goldfinch is plain in winter. Those who look a little closer—or peek into a bird guide—will have little trouble distinguishing the siskins from the redpolls in a minute or two. They do not necessarily travel together but they often do, apparently just for the fun or it.



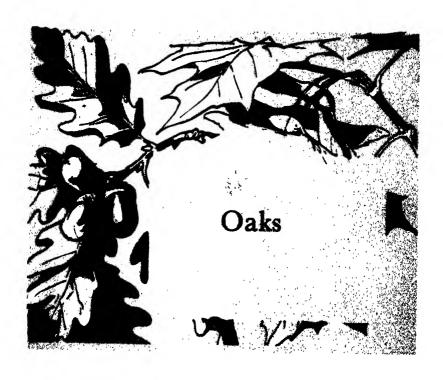
Not many gunners know that the odd, solemn-looking game bird, the woodcock, is one of the finest feathered singers of this country in the dusk of an April evening or, for that matter, almost any fine moonlight night from late March to flowery May. It's the male who does the singing in the dusk or the deep dark over the female sitting silently on the eggs in the nest on the ground below. The performance begins with the odd-looking male woodcock in an open space on the ground uttering a loud, nasal and piercing "pe-e-ent" at intervals. Then there is silence in the dusk, and next

is a fluttering of wings as the bird climbs and beats its way aloft to begin its song. The downward flight is a series of short circles and zigzags during which the romantic bird, unseen in the dusk or moonlight, cascades a rippling roulade of melodic whistles over the shadowed spot where the brooding female rests on the nest. Who hasn't heard the woodcock sing in the deep dusk of returning spring has missed one of the finest melodic performances that the feathered world has to offer.



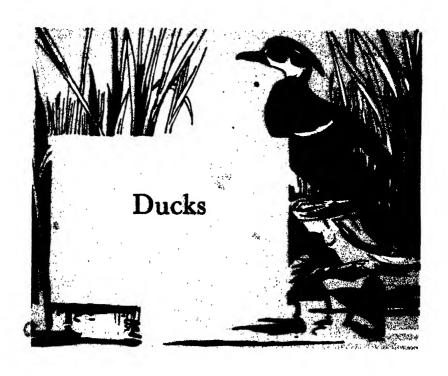
Who would go duckhunting in the subway of New York City? Yet one speeding subway train on the Coney Island line yielded a wild duck to the astonishment of the excited passengers. How it came to be aboard the train was a mystery. Probably it flew in an open window at night when the train was lying empty in one of the aboveground yards. In any case, it was during the rush hour when the train was packed with passengers that the duck suddenly flew out from under the feet of a frightened woman and dashed up and down the length of the car until it struck a stanchion and

stunned itself. A sympathetic passenger picked it up and brought it to a newspaper office, where he offered it as a "sick seagull" with an interesting story. It was recognized as a somewhat hungry and battered old-squaw duck, a game bird of a beautiful black-and-white pattern with a remarkable change of plumage between seasons. An amateur naturalist took the travel-worn duck, fed it for a few days, gave it kind treatment and then turned it loose in a favorable spot to find wild companions. It paddled away quickly, apparently none the worse for its ride in a New York subway train.



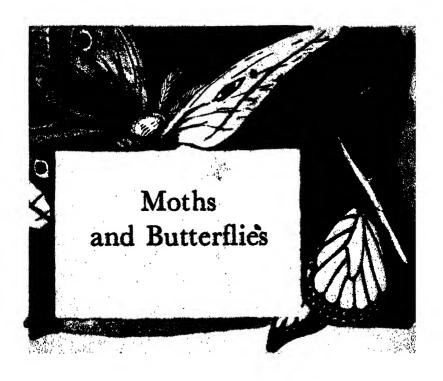
Great oaks from little acorns grow. And it's just as simple as that to distinguish oak trees from all the other kinds of trees in the fields or woods. A tree is known by the fruit it bears. If it yields apples it's an apple tree. If it yields acorns it's an oak of some kind, the varieties being many in almost all parts of this country. The oaks, however, are divided by botanists into two large groups, the white oaks and the black oaks. To the botanist, the difference is that the black-oak acorns take two years to mature, while the white-oak acorn is the product of a single season. But the ordinary stroller

may distinguish the white oaks from the black oaks without waiting for the acorns to grow up. Just a leaf from the tree will tell the tale. Oak leaves come in many shapes, but no matter how sharp or blunt the ends of the "sinuses" or indentations, the outer ends of the main veins or ribs of black-oak leaves always are armed with hair-like projections, often like miniature pin points. The white-oak leaves do not have such pointed features. That might make a good start on an investigation of the varieties of oaks in your neighborhood. There should be a dozen or more in any well-ordered community.



QUACK! QUACK!" says the duck. Or so the nursery tales have it. But, as a matter of fact, there are dozens of varieties of wild duck on the water or on the wing in this country, and only two of the common species use the "quack" in their family circles. These are the black duck and the mallard. Other varieties, including the old-squaw, canvasback and goldeneye, have native notes that by no means come under the head of quackery. The wood duck, probably the brightest-colored bird of the North American continent and the only native duck of the United States that nests in trees,

has a soft, whining whistle for its call cry and a purring, persuasive snote for family chatter in security. The wood duck, where it is protected, soon becomes quite trustful and offers to the onlookers a pattern of feathered colors that not even the gorgeous plumes of tropic lands can surpass.



THE ESSENTIAL DIFFERENCE between a moth and a butterfly is not that one is a pest to be attacked with moth balls and the other is a thing of beauty flitting lightly from flower to flower. Nor is it that butterflies flit about gaily in the sunshine and moths are creatures that emerge at dusk and are fatally attracted by lamps or open lights at night. It's true that most butterflies are dayworkers and many moths are nocturnal, or nightworkers, but this is merely incidental. The main scientific distinction is in the shape of the antennae or "feelers." All butterflies have minute knobs or hooks at the end of

their antennae, whereas moths have no such attachments. It might be mentioned that a moth in the flying stage never would bite even a small hole in a serge suit or clothing of any kind. It's the larva, or moth in the "worm" or "caterpillar" stage, of the house-hunting kind that eats its way to infamy in a clothes closet.



It may be a bit of a shock to learn that the black-eyed Susan was really named after an old man with a beard. Its scientific name is *Rudbeckia hirta*, and thereby hangs a tale.

It was Linnaeus, the great Swedish scientist, who gave most of our flowers and trees their Latin names. When he was a poor student at the University of Upsala in Sweden his genius was recognized by the venerable and bearded Professor Rudbeck, a great figure in the world of botany at that time. He befriended the poor student, Linnaeus, and allowed him to live in the Rudbeck house-

hold. Years later, when the pupil who had become famous was cataloguing and naming flowers for posterity, to the lovely black-eyed Susan from America he gave the name Rudbeckia hirta in kindly memory and grateful affection for Professor Rudbeck's helping hand that was reached out to a poor young student. Of all the wild flowers, none will flourish longer after having been picked than the black-eyed Susan. If the water is changed often, these common and beautiful flowers will retain their fresh appearance for almost a week.



Some think that the robin redbreast is the "town crier" among birds of the rural fields and city suburbs, but the real feathered watchman of the countryside is the kingbird or tyrant flycatcher. Always perched on the topmost limb of a tree to get a wide view of insect foodstuff going by on the wing, the kingbird also takes shrieking notice of invading hawks, stalking cats, marauding crows, skulking owls or anything else that might be a disturbing factor to the orderly bird life of the area. Farmers thought they had given the kingbird a bad name when they called it the "bee martin" on the

theory that it swallowed their honeybees who were bearing golden pollen back to the hive to be manufactured into honey. But scientists looked into the charge and came to the defense of the kingbird, saying that the bees taken by it are practically all drones, who might eat a jar of honey in time but wouldn't manufacture a drop of it in a thousand years.



Thou blossom, bright with autumn dew,
And colored with the heaven's own blue . . .
Blue—blue—as if that sky let fall
A flower from its cerulean wall.

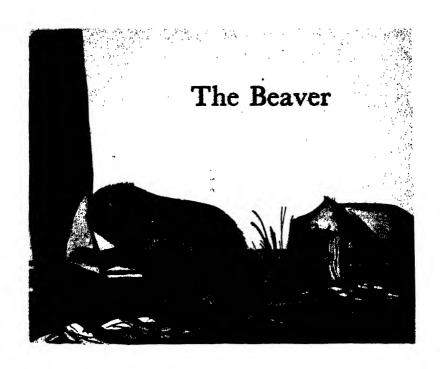
So sang William Cullen Bryant of one of our most beautiful wild flowers and also one of the hardiest, the fringed gentian. It blossoms in moist meadows in brisk October and bravely flaunts its feathery, silky, fringed blue petals to the frosty edge of threatening November. Its beauty is a perfect subject for a poet, and the

way it flings its dainty petals in the face of oncoming winter is a challenge to stir the heart of a walker in the autumn fields. The closed or bottle gentian blooms at about the same time and in similar situations, but somehow the daintier and prettier fringed gentian carries a greater appeal to the eye and to the heart.



Because they hide their heads modestly under protecting green leaves, some of the most beautiful flowers of the spring season often are overlooked by wanderers in the fields and woods of April or May. The nodding wake-robin and some other trilliums are of that timid type, and so is the wild mandrake or May apple. Only those who recognize the large green leaves of the wild mandrake and push it aside will find the small, delicate and beautiful white flower jutting out from the stalk beneath. The wild mandrake flourishes in moist woodlands over the greater part of the country

and from the Canadian border to the Gulf of Mexico, but only those who are not too proud to stoop will ever find the lovely white flower hiding so modestly under the great greenery of the strong large leaves.



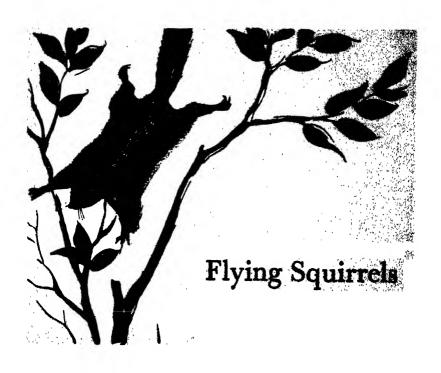
The animal engineer is the fur-coated, flat-tailed, odd-looking beaver, now an object of legal protection through most of its habitat. This odd and interesting animal, using its famous foreteeth as saw and chisel, fells trees to make dams across brooks, streams and little rivers. This raises the water level to the point desired, so that the beaver colony can live in safety and contentment with a supply of food at hand and a way of escape from peril either by water or land. They fell the trees with great ingenuity, gnawing and cutting away at an angle that will bring the tree

down just where it is wanted or as near as possible to that spot. By the sides of those dams, or even as parts of those dams, they construct animal apartment houses for beavers only. When high hats made of real beaver pelt were in fashion, such hats were sometimes jocularly referred to as "castors." That's because the beaver's scientific name is *Castor canadensis*. Abraham Lincoln wore a "castor," as old illustrations show.



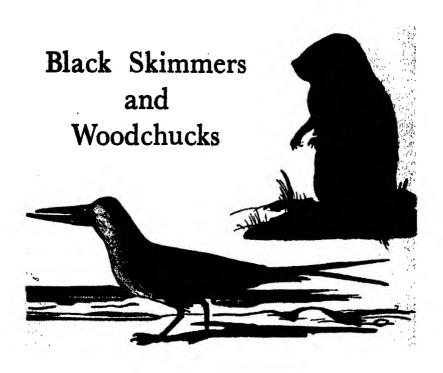
WITH THE EXCEPTION of the polar bear, all native bears of the North American continent hibernate or sleep through the cold months of the winter. Some species sleep almost six months, and thus half their lives are passed in blissful repose. In the warmer parts of the country, of course, the bears take shorter hibernating naps and may even get up and walk about for a stretching period on warm days in midwinter. But for the most part, when winter comes Bruin nestles in the hollow of some big tree trunk or the recesses of some cave and snoozes away for weeks or months, drawing what

little sustenance he needs from the layers of fat accumulated by good eating before the cold set in. A question that often puzzles is: Why should the bear, wearing a wonderful coat of fur, hide away from the cold winds and snow that are braved by comparatively dainty deer with much thinner coats and by cheerful little winter birds that are protected only by feather jackets?



There probably are flying squirrels near your home because there are flying squirrels of some species in almost all sections of the United States. They can live almost anywhere because they will eat almost anything, animal or vegetable. They are seldom seen, however, because they usually hide away until dusk sets in and they do most of their foraging in the dark. Flying squirrels have neither wings nor feathers, and they do not actually fly; they volplane from high places to lower landings. They have skin extensions along their sides, from foreleg to hind leg, and by flatten-

ing out and spreading these extensions, they can take off like animated gliders from a considerable height and land safely and lightly wherever they wish below. With a last second upturn, they usually land on the trunk of a tree a few feet above the ground. In the winter, when the leaves are off the trees, the presence of flying squirrels in any area can be detected by the sight of their characteristic nests of dead leaves in the smaller forks of trees. They also live in the hollows of trees and will even invade farmhouse attics without invitation.



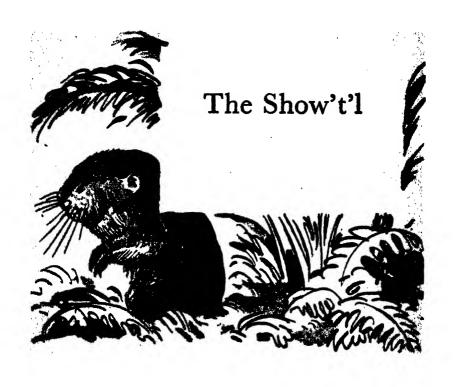
Dogs Bark. Birds whistle. Every boy knows that. But there can be found in this country some birds that bark and some animals that whistle. The common woodchuck of the East and the hoary marmot of the West are animals that whistle loudly and clearly. Black skimmers are odd-looking birds that fly in flocks along our coasts and yap like packs of small dogs. The hoary marmot, for good reason, is often called "the whistler" by the riders of the sagebrush sections, and any farm lad of the New England hills knows the defiant whistle of the woodchuck when the fat fellow is roused to

anger. As for the black skimmer, the bird that yaps like a dog, it's about the size of a small gull, is black above and white below, and has a long, conspicuous bill with a vivid splash of red on it. The lower bill is longer than the upper on this odd bird, and it's with this longer lower bill that the skimmer makes a living. It flies low over the water until schools of small fish, pursued from below, are sighted on the surface. Then the skimmer lets down its lower bill to the surface of the water and literally "skims up" a succulent food supply. The bark is an added but unessential feature.



About two hundred years ago Admiral Louis Antoine de Bougainville of the French navy set out to sail around the world. It took him three years to complete the voyage, and on the trip he came upon many strange lands and touched at many tropical islands. From one of the tropical islands somewhere in the Pacific Ocean he brought back a flowering plant that, as a shrub or climbing vine, is now planted in the warmer parts of most civilized countries for the delightful decoration it adds to house, garden, trellis or what walls there may be in sight. This is the bougainvillea,

named after the old admiral himself. A botanist might point out that the numerous "purple flowers" (there are color varieties) of this ornamental vine are not the real flowers but the tinted adjuncts to the real flowers, the small yellow bloom in the center, but that's a merely technical matter. The poetical question is: What's in a name? The answer in this case is plain. Almost everything else that Admiral Louis Antoine de Bougainville did is forgotten, but where the bougainvillea blooms there is a beautiful living memento of the adventurous voyage of a French admiral of long ago.



This is a matter of pioneer history. When the famous Lewis and Clark expedition of 1804-05 reached the upper Pacific Coast region of this country that is now Oregon and Washington, Indians brought them skins of animals that were unknown to the white men. The members of the expedition thought the Indians had cut the tails from the pelts, but it turned out that no such foreshortening had been done. The strange little animal, about the size and shape of a guinea pig, had only a stump of a tail. Hence its common name, short-tail, shortened since to show't'l by common consent.

Scientists call it the sewellel or, worse still, Aplodontia rufa. It has no close relatives and might be considered something of an orphan among our animal families. It is rarely seen, even where it is a regular dweller, because it is so small, lives in burrows in tangled wildwoods, exists on a vegetable diet and slips out to eat that at night. This quiet design for living has enabled the show't'l to survive, practically unseen, where bigger and bolder animals have been driven to the verge of extinction.



One of the Quaint Legends of the Southwest is that prairie dogs, burrowing owls and rattlesnakes have been found living in harmony in one underground bungalow or prairie-dog burrow. This can be set down as a curious chapter in "unnatural history." The odd-looking burrowing owl will take over a prairie dog's burrow for its own convenience if the prairie dog has moved out. This saves the owl the labor of excavation. A rattlesnake, too, will often seek shelter—or food!—in a prairie dog's burrow, but if there is a prairie dog at home, he will hurriedly decamp without stopping

to argue with the poisonous intruder. It's a shame to spoil a nice story, but according to scientists who have looked into all this, the truth is as follows:

Prairie dogs are the original constructors and tenants of these burrows.

A burrowing owl may move in if the prairie dog has moved out. The prairie dog will move out if a rattlesnake moves in.

No respectable burrowing owl would associate with either a lively prairie dog or a slithering rattlesnake.

The tale of the three living in harmony is a pretty story but, unfortunately, it isn't true.



Back and forward over the ponds in the meadows and the pools in the woods flit the dragonflies or "darning needles" on warm summer days. Long ago somebody told children that the darning needles would sew up their ears, and, for that or other reasons, there exists among youngsters and oldsters a fear or dislike of these beautiful winged insects. As a matter of fact, the beautiful and graceful dragonflies of many varieties are not only harmless but beneficial. They feed on mosquitoes and other insects that are injurious or annoying to man and beast. With this assurance, take a closer

look at the dragonflies cruising over streams, ponds, brooks and swamps. Some have gorgeous hues on their bodies and strange patterns on their transparent wings. It takes patience to get close to them, because they are such tireless fliers that a waiting observer may think they never will pause for a rest. But they do come to rest on twigs or foliage at the waterside at times, and the wait is worth while if it gives the curious eye a good look at one of these brilliant crusaders of the air that are doing good work in the world.



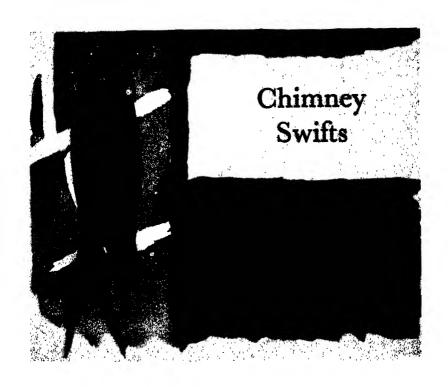
IF WINTER COMES! It means that the birds of summer have gone to spend the colder months somewhere to the southward, some to Central America and some to the coasts or interior of South America. It's like losing old friends when the robins and other familiar feathered friends of the summery days depart, but with a little coaxing winter will bring feathered guests just as cheerful and friendly in the garden or the dooryard. Chickadees, nuthatches and woodpeckers that keep to the cool woods or live a bit to the northward in the summer will gladly become daily visitors and regular

feeders where suet is put in wire baskets on tree trunks or branches of shrubbery around the house. Chickadees will also eat birdseed or bread and, along with the nuthatches and woodpeckers, dote on hulled peanuts—not salted! But suet seems to be the favorite item on the menu if the birds are allowed their choice. Anyone who lives in the country or the suburbs of a city and wishes to have regular bird visitors in the winter needs but to keep a little suet on display, and there will be no lack of cheerful guests before, during and after the snowstorms and high winds of a northern winter.



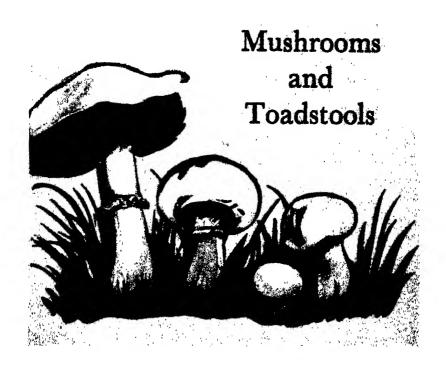
Valiant is the name for Jenny Wren. There are wrens of various species all over the country, and many of them build and live in cactus-covered dry wastelands or the cool rushes of deep swamps, but Jenny Wren is the common house wren of dooryard and garden, a wild bird that likes nothing better than to live with human neighbors. This familiar little brownish bird with the sharp bill and sharp temper, though "no bigger than a minute," will drive off interlopers of all shapes and much larger size in defense of its nest in a box or a knothole in the side of a building or wherever it

may be around house or garden or barnyard. Despite the rather quarrelsome disposition it displays toward other birds that intrude on its precincts, it is much appreciated for the great courage that goes with its small size, its apparent appreciation of the advantage of living with kindly human neighbors and its cheerful chattering that seems to pour incessantly from an overflowing throat.



A BIRD that has completely changed its nesting habits because of the advance of civilization is the chimney swift. It has forsaken the hollow trees or caves of ancient days and now makes its nests and rears its young in the chimneys of houses in city and country. It is often called the "chimney swallow" but it is not a member of the swallow family or a close relation. It is closer to the hummingbirds, according to the scientists, but regardless of whether it be called swift or swallow, it is a regular tenant of brick or stone chimneys, gluing its nest to the dark inside walls. Often the householder can

hear the twittering of the young up in the chimney when the mother bird flutters down with food for the family. Its wheeling, chattering flight in the air over the housetops is a familiar sight as it pursues insects on the wing. Because of its short tail it has been likened to a "flying cigar," but, for all that, it is a great flier, and one of its larger relatives of the tropics is said to be the fastest of all birds in the air.



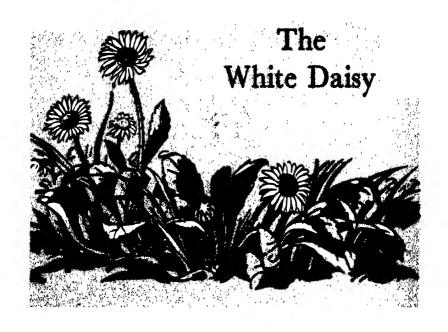
THE FAMILIAR STORY is that mushrooms are table delicacies and toadstools are nasty, poisonous things. The truth is that toadstools are found nowhere in any scientific catalogue, and mushrooms and toadstools, or whatever else they may be called locally, all belong to the astounding botanical division of *fungi*. The varieties are endless, and their speed of growth is amazing. The familiar mushroom of the table that goes so well with steak is *Agaricus campestris*, but hundreds of varieties are edible and succulent, and some are as large as a head of cabbage. But there are some deadly poisonous

varieties, too, and only those who really know the deadly and harmless species are qualified to gather wild mushrooms—or fungi—for human consumption. Mushrooms and other gilled fungi do not have flowers like most members of the botanical family but produce "spores" or minute seed cells that reproduce the species. A single mushroom of the common table type is capable of producing a million spores, but of course only a few of the spores come to eventual maturity, otherwise the world would have been overwhelmed with fungi ages ago.

Polar Bears

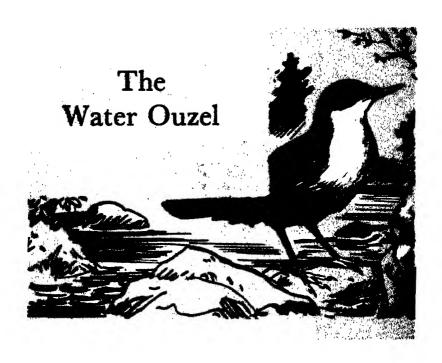
There are some decidedly odd points about polar bears, those cool white-coated denizens of the icy North. On the average, they weigh about as much as a horse (twelve hundred pounds). They use only their forepaws in swimming and yet are probably the best swimmers among large four-footed animals, and they are really fur-footed as well as fur-coated. Unlike other furred animals, their fur extends right down over their toes and pads, which is one reason the polar bears walk so easily on icy slopes. The rough fur on their feet acts as a nonskid device. Pound for pound, the otter may

be a better swimmer than the polar bear, but the great white bear ventures farther out to sea. They have been seen cruising on icebergs two hundred miles from the nearest land and have been sighted in the water forty miles from any floating resting place of any kind. Penguins are like polar bears in some respects. They like icebound shores and frigid seas. But though penguins and polar bears, with these similar tastes, may be neighbors in a zoo, they are half a world apart in nature. The Great Divide for them is the equator and many miles on either side. There are no penguins native to the Northern Hemisphere and no polar bears native to the Southern Hemisphere. Perhaps some reader would like to toy with the question of how that came about.



The common white daisy of our fields is so widely distributed and so well known that pictures and mention of it rarely are included in guidebooks to flowers of field or garden. Yet it is indeed a lovely flower and, when knee-deep in daisies, it might be recalled that these plentiful plants are not natives of this country but were brought here originally to give a touch of home to a strange country. The common white daisy is a native of southeastern Europe. From there it spread all over Europe and to English fields and gardens. When the early settlers arrived in New

England they found a strange, wild land in which they tried to make themselves at home. Some thoughtful settlers either brought with them or sent for the seed of the meadow and dooryard daisy of Old England, and soon the familiar flower of old homes cheered the settlers in a new country. That's one reason why this flower often is called "the English daisy," though its original source was "South and by East" by many a mile over land and water. But wherever it came from, it remains close to the hearts of older folk, just as it is always in the fingers of children when the June fields are white with the flowers that tell she loves me or, alas, she loves me not.



ONE OF THE real wonders of nature is the water ouzel or dipper, a bluish-gray bird about the size of the familiar robin, a constant singer in the wilderness and a bird without webbed feet that makes a living not near, or on, but under water. This inhabitant of the wild gorges of the West, down which tumble the swift streams of the Sierras, dives into water as deep as fifteen feet, "swimming" with its wings and calmly feeding on insects it finds on the bottom of streams or by turning over stones at that depth. It sings from dawn until dusk and through all the seasons of the year. It

delights in foam and spray and waterfalls. John Muir wrote that no other bird of the Rocky Mountains cheered him so much in his lonely wanderings. He likened its song to the bubbling waters along which and in which it lives its lonely but apparently joyous life, the lone representative of its avian race in the Western world, a strange little bird that doesn't look like much but can "dive like a duck, swim like a fish, fly like a swallow and sing like an angel." In this case dull feathers make a remarkable bird.



The silence of the night in country districts often is disturbed by a sudden and mysterious raucous squawk from somewhere overhead. Though loud enough to be heard at a considerable distance, it has a hoarse and somewhat disconsolate tone to it. What strange bird is it that flies by night and utters such a weird cry? It isn't a strange bird at all, but the very common black-crowned night heron that is to be found along and over the water courses and swamps of great parts of this country. It not only flies much by night, but also feeds readily under cover of darkness along the

borders of lakes and streams, dining on misguided little fishes or hapless frogs or whatever other tidbits may be picked up in such localities by an industrious wader with a strong, quick and determined bill. The black-crowned night heron is as large as a herring gull and, along the larger rivers and lakes or near the seacoast, undoubtedly is often mistaken for a sea gull by casual observers. But the loud squawk in the night is a certain identification, and, indeed, many farmers who never have recognized these odd birds by day know them unseen by night under the name they have so well earned, "quowks."



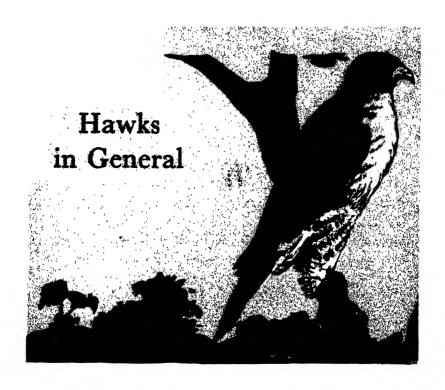
The most widely distributed of birds is the fish hawk or osprey, a winged fisherman of the seven seas and the deep rivers and wide lakes of all the world. The bald eagle is the national bird of the United States. If ever there is a United World, the osprey would do as a feathered international emblem, since it builds its nests and lives contentedly in practically all countries and climes. Its huge nests, perched high over lake, river or seacoast, sometimes on the crosstrees of electric power-line poles, often in the upper dead branches of tall trees, are landmarks in many localities. It's some-

thing to see an osprey, several hundred feet in the air on a scouting cruise, spot a fish under the water and plunge downward for the catch. With its wings closed and shoulders hunched, it dives into the water and, if the hunt is successful, comes up with a half pounder or an even larger fish for the osprey household. It's a feathered Izaak Walton, fishing all waters in many lands and bringing up the fish without rod, tackle or bait. It is a large bird, easily observed at its spectacular work and, except around fish hatcheries, is much admired by all beholders.



Anyone who wades into the cattail swamps of the eastern half of the United States will find the curious nests of the long-billed marsh wren, a blithely bubbling singer in season. The nests, woven of marsh grasses, are fastened to several or more cattail stalks and have one particularly odd feature: they are equipped with side doors and are closed at the top. Yes, the long-billed marsh wren not only builds a house with a side door, but does some extra building for protection too. Larger birds, like crows and bluejays, raid the homes of smaller neighbors and, sad to say, make meals of eggs

or nestlings. To make theft and slaughter more difficult for such marauders, the long-billed marsh wrens deliberately build three or four nests and occupy only one, apparently in the hope that bandit birds will, after searching an untenanted dwelling, conclude that there are no victims to be had in that sector and carry their wicked wings elsewhere. Whether or not it is the result of building such extra unhaunted houses, the long-billed marsh wren thrives mightily in our swamps and continues to be a bustling, bubbling personality amid the reeds where it is found.



Don't shoot that hawk! Not without taking a second look, anyway. The first impulse of the farmer when he sees a hawk is to yell: "Johnny, get your gun!" But most hawks are good hawks, beneficial birds, and the United States government has issued bulletins to prove it. The general belief that all hawks spend their lives grabbing poultry, songbirds and game birds in their cruel talons and gobbling them down is utterly wrong. There are dozens of varieties of hawks in this country, and only a few are real killers of birds or farm poultry. The trouble is that not many persons distinguish

hawks except by size, and the bigger they are, the worse they are deemed, which is another mistake. Many innocent species, like the red-shouldered and the red-tailed hawks—miscalled "hen hawks"—are shot down and nailed to the barn door because of suspected designs on the poultry yard, whereas the truth of the matter is that they live largely on rats, mice, snakes and assorted dainties of that kind. Such hawks help the farmer to protect his crops from pestiferous rodents and deserve better than a salute from a double-barreled shotgun and a load of lead pellets. If there is any shooting to be done, ask some local authority to point out the destructive varieties so that no sad mistake will be made. Unless that is done, indiscriminate firing at hawks is bound to kill off many well-mannered species that are helpful to the farmers of the section.



There are tales of tall white birds, with long thin beaks and long thin legs, seen wading in the lakes, swamps and rivers of various parts of the country. They are variously reported as "white storks," "white cranes" and "white herons." Now the only true stork in this country is the wood ibis, greenish-black in hue, and rarely seen beyond the semitropical swamps of Florida. No North American crane wears all-white plumage and, furthermore, cranes are scarce, threatened with extinction. So the tall white birds, long of bill and legs, must be herons of some kind, or egrets, which belong to the

heron family. The great white heron is seen only along the keys of southern Florida. Therefore, those tall white birds seen in so many other parts of the country, as far north as the Canadian border, must be either American egrets, which stand over three feet high, snowy egrets, about two feet high, or, which may seem odd, the wandering youngsters of the little blue heron species. In their first-year plumage the young of the little blue heron are pure white. Hatched in the Southern part of the country, these white-plumed little blue herons often wander over the Northern parts of the country before settling down as older and blue-feathered residents of the more southerly regions.



An interesting shrub or small tree that is fairly common in favorable spots over the Eastern part of North America is the witch hazel. The Indians believed that the crushed juice of the leaves had sovereign curative qualities. That there was some solid foundation for this early native notion is established by the fact that the extract still may be found on the shelves in drugstores in bottles labeled *Hamamelis virginiana*, the scientific name for the witch hazel. It is used frequently as a helpful lotion for external injuries, as a scalp tonic and as a "rub" for sprains or tired muscles.

But to strollers of the fields and woods the more interesting thing about the witch hazel is that it bursts into flower about the time of year that sees other native shrubs and trees, except the evergreens, shedding their leaves and getting ready for a hard winter. It's usually in late September or October that the witch hazel puts out its little yellow ribbons, four to a set, that serve as petals to its delayed flowering display. A bit later, when the petals have fallen, the nut or seed clusters suddenly open with a spring, and the seeds are sent flying ten or fifteen feet away, as if fired from a concealed popgun. Possibly that should be ranked as the real witchery of the witch hazel.



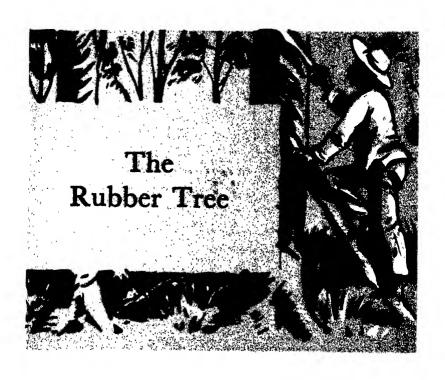
Scotland has been called the Land of the Thistle, but the truth is that thistles grow and flourish in North and South America, in Europe, Asia, Africa, Australia and all the larger islands of the temperate seas. Wherever thistles grow there will be found, fluttering about in the sunshine, the beautiful butterfly known as the painted lady, the *Vanessa cardui* of the lepidopterists or butterfly and moth experts. It sips the sweets of the thistle bloom of many lands and is everywhere at home, save perhaps in the tropical jungles. It flits about New England dooryards, wings its way from

one botanical breakfast table to another in sunny California and greets the knowing eye in all of the forty-eight States of the Union. It may be encountered by travelers in Greece, Arabia, Indo-China or "by the long wash of Australasian seas." Despite its brief span of life, by seasonal replacement it remains "a thing of beauty and a joy forever," bringing, perhaps, in some far foreign field one touch of home and memories of a dooryard garden of long ago.



It might be national pride—or prejudice—that causes the inhabitants of this country to point to the giant redwoods of the Pacific Coast as the largest and oldest trees in the world. By all accounts they are the tallest trees now existing in the world, but though the age of some flourishing specimens has been estimated at twenty-five hundred to three thousand years, some scientists have it that there are older trees on other continents, notably the dragon tree of the Canary Islands, with an estimated age limit of six thousand years, and the baobab tree of Africa, with a possible life span of five

thousand years. It may be surprising to learn that the oriental plane tree, called the sycamore or buttonwood in some localities, that is common in Europe and North America, is a tree of very long life in favorable haunts, and its age limit by some authorities is placed at four thousand years. It is said that the English oak may hold up under the weight of two thousand years of passing time. But just the same, a California redwood two hundred and fifty feet in height and fifty feet in circumference at the butt is something to see and a natural lofty monument of which any nation might be proud.



Handsome is as handsome does." Those were Grandma's homely words, and, on that basis, possibly the most beautiful tree in the world is the rubber tree. Certainly it has been the most useful tree in the recent mechanized march of civilization. Among other things, it was rubber that helped and guarded the great flow of electricity when that stream of power and light began pouring its benefits to mankind. It was Christopher Columbus who first learned of the tree and its astonishingly useful product. In his second voyage to the New World he found natives along the banks of the

Amazon River in South America playing with a crude rubber ball. He traced the material of the ball to its source and found that it was the sap of a tropical tree to which the scientists have given the name Hevea brasiliensis. But nothing much came of the discovery for centuries until an Englishman, suspecting some of the many uses to which the product could be put, transplanted seedlings from Brazil to British colonial possessions on the opposite side of the earth. Practically the world crop of rubber, originally a native South American product, now comes from Ceylon, Malaysia, the Dutch East Indies and such points far distant from the homeland of the most valuable tree in the world.



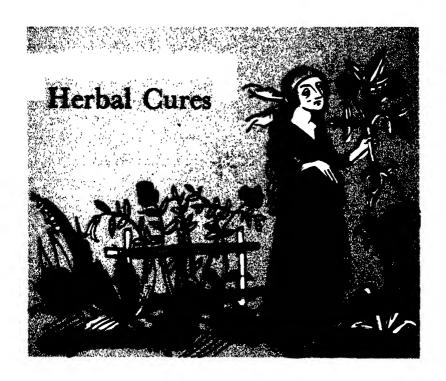
In late spring or early autumn the cooler sections of our Atlantic and Pacific coasts have some distinguished feathered visitors known as ruddy turnstones, and never have birds been better named than the turnstones. It's practically a trade name. The bird turns stones for a living, feeding on the marine tidbits and forms of insect life found beneath them. It's a bird about the size of the familiar robin redbreast but is not a lawn haunter or a tree percher like the robin. It frequents beaches, sand bars and the mud flats of our coastal regions in the trips between its breeding grounds on the edge of the

Arctic Circle and its winter quarters that stretch from the Southern coasts of this country to far sections of the South American waterfront. But what makes the ruddy turnstone a particularly distinguished visitor is its coloring. It has a ruddy back, is white below, has mingled black and white fore and aft, the whole providing a pattern that is strikingly singular, especially when on the wing. In an inspired moment a child, on being shown a ruddy turnstone on the wing, said it looked "like a piece of flying marble cake." Only the healthy appetite, the clear eye and the happy heart of a child could turn out a fitting phrase of that kind.



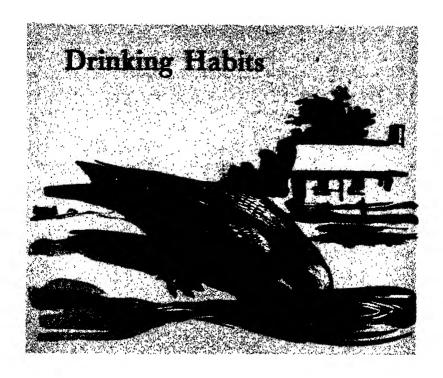
The Brilliant scarlet tanager, sometimes called the firebird, is not only one of the most attractive feathered visitors or residents of many parts of this country, but it is also a very friendly bird and a persistent singer through the hot summer months when most other birds restrict themselves to random call notes or, if danger threatens, screams of alarm. Anyone who learns the sound of the scarlet tanager's voice will find that this deep scarlet bird with the black wings is much more plentiful in the neighborhood than was previously suspected. It has a gently rolling warble, vireo-like, but

louder and with almost a metallic vibration to it when heard near by. Its call cry (chip-churr!) may be detected a quarter of a mile off in quiet woods. The scarlet tanager will build in trees around dooryards, and if it does, a little help from the householders may save some of the young tanagers from harm. The beautiful firebird is a most unlovely nest builder, and young birds all too frequently tumble out of the stingy, scraggly bunch of twigs that the parent tanagers think good enough for a cradle. Scarlet tanagers should take lessons from the orioles in nest building and safety-first appliances for keeping fledglings where they belong. But either the orioles aren't giving free lessons or the tanagers simply can't be bothered to learn. The female scarlet tanager is a greenish-yellow bird of very plain appearance, quite a contrast to the startling color combination worn by the male until early autumn, when he, too, puts on a sober suit for winter wear.



Herbalists down the ages have had some curious notions about plants and their curative qualities. Pliny, the Roman naturalist, recommended an infusion of the leaves of the ash tree with white wine as a cure for snake bites. In England of old it was believed that the juice of the leek would remove warts from the skin and a leek rubbed over the doorway of a house would ward off lightning. There are still some rural residents who carry a buckeye or horse chestnut about in their pockets as a protection against rheumatism and other ills the flesh is heir to. The beautiful peony of cultivated

gardens is of ancient lineage and was brought from China to Europe and thence to this continent. In old days lunatics were given an infusion of peony or "piney" tea, brewed from the seeds, to cure them of mental derangement. Sometimes the seeds were strung into a necklace and worn to counteract the wicked designs of witches. The story is that peonies were named after a Greek physician, Paeos, who used the flower and plant medicinally to cure a Greek leader wounded in the Trojan War.



THE PIGEON is considered a domesticated bird and lives, for the most part, under the constant gaze of human neighbors or land-lords. How many have noticed an odd trait of the pigeon that sets it apart from other birds or domesticated fowl in almost any region? Most birds drink in sips like chickens, dipping the bill down, scooping up some water and then elevating the head while the water runs down the throat. Even ducks do that, and other water birds. But observe the common pigeon. It simply sticks its bill right into the water and, to put it plainly, "drinks like a horse,"

swigging away without ever lifting its head until it has had its fill. Aside from the efficient water-supply system of the pigeon, there is another drinking habit among birds that is worthy of note. No human could drink salt water indefinitely and thrive. Most birds need fresh water for their diet too. But oceanic birds and sea ducks can wash down their dinners with sips of salt water and flourish on it. It's a neat adaptation by Nature whereby a potion that would be poisonous to land birds is a health-sustaining drink for the winged roamers of the wide seas.



About a century ago the Mormons, whose beliefs kept them at odds with their Illinois neighbors, set out on an overland trek to a wild country in which they hoped to live their own ways. After many hardships on the journey, including Indian raids on their column, they reached the Great Salt Lake and there founded the community that became Salt Lake City. All around the lake was wilderness, but the hardy Mormons cleared the land and sowed grain for a crop that was needed to keep the colony from starving. Hardly had the crop sprouted before the fields were covered with

a native species of grasshopper that swarmed to this unexpected feast of luscious greenery. Starvation seemed to be staring the Mormon tribe in the face. When all seemed lost, a lone gull appeared, then more gulls and then thousands of gulls, all of which feasted on the grasshoppers and thus saved the much-needed grain crop and also the lives of the Mormon pioneers. The birds engaged in this life-saving act in the territory that has since become the state of Utah were Franklin's gulls, a black-headed species that is rarely seen on our seacoasts, preferring the inland waterways and open fields between the Rocky Mountains on the west and the Appalachians on the east. In grateful memory of the gulls the Mormons erected a monument to them, which is one of the pleasant sights of Salt Lake City.



 $\mathbf{I}_{ ext{T}}$ was tom moore, the amiable Irish poet, who sang:

No, the heart that has truly loved never forgets, But as truly loves on to the close, As the sunflower turns to her god when he sets The same look which she turned when he rose.

That was stretching it a bit—by poetic license. Of course the big yellow sunflower on a thick stalk doesn't twist its face to follow the sun across the sky each day, but, like the sturdy unblushing

flowers that love the open, it prefers to spread its petals in the direction from which it receives the largest amount of To that extent the average sunflower has a leaning towar But better than that, the seeds of the sunflower are lust for poultry and wild birds. The seeds are a bit large for the birds, but the crop may be gathered and ground and offered feeding stations for winter visitors of the smaller variety. For sturdy cheerfulness of its bright yellow face and the succul it affords our feathered friends, may the sunflower nevel hospitable dooryards and kindly gardens.

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